IBM

WebSphere software
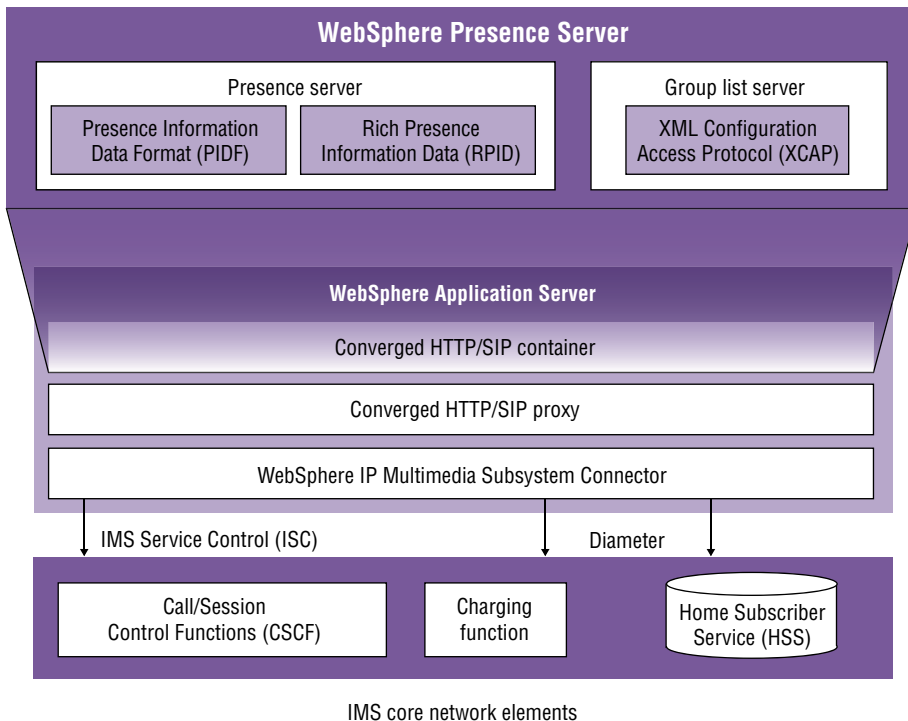
IBM WebSphere Presence Server

Highlights

- Utilize an independent, cross-application presence server built for service provider networks

- Help create services that make customer communications more productive by utilizing presence information from multiple sources

- Harness the flexibility and reusability of a centralized enabler to decrease costs and increase revenue

- Implement a carrier-grade presence platform for IP Multimedia Subsystem (IMS) deployments and group list management

- Leverage IBM's extensive presence and service provider experience

- Interface with IMS network elements based on industry-standard interfaces for flexible service oriented architecture (SOA) deployments

WebSphere Presence Server

Presence server		Group list server
Presence Information Data Format (PIDF)	Rich Presence Information Data (RPID)	XML Configuration Access Protocol (XCAP)

WebSphere Application Server

Converged HTTP/SIP container

Converged HTTP/SIP proxy

WebSphere IP Multimedia Subsystem Connector

IMS Service Control (ISC)   Diameter

Call/Session Control Functions (CSCF)	Charging function	Home Subscriber Service (HSS)

IMS core network elements

WebSphere Presence Server, built on the converged WebSphere Application Server platform, provides a flexible, reusable service enabler supporting the delivery of rich, next-generation services.

Service providers must move service enablers beyond application-specific silos
Telecommunications service providers already know that individuals use more communications devices today than ever before, in both their personal and professional lives. But to take advantage of this array of devices and drive new levels of customer service and revenue in the years ahead, service providers must master *presence*. This concept refers to an individual's availability, capability and willingness to be contacted. For instance, on what devices and applications can the individual be contacted right now? What are the capabilities of those devices and applications? Does the individual wish to be contacted on them? And by whom? The answers to questions such as these constitute that person's presence.

Today, applications and services use independent, application-specific silos of presence and group list information. Since this information is isolated, it cannot be shared across applications to make services more valuable.

Establish a flexible, high-performance execution platform for next-generation services

The proliferation of Internet Protocol (IP) technologies such as Session Initiation Protocol (SIP) — and the development of open standards like the IP Multimedia Subsystem (IMS) framework and Parlay X Web services — create the opportunity for telecommunications service providers to deliver enhanced services to their customers more rapidly. Further, they can help cut the costs of developing and managing these services, while overcoming the challenges of inflexible legacy infrastructure. By leveraging these technologies, service providers can use a single platform to support rich, converged applications and communications traffic — voice, video or data — over fixed and mobile networks, independent of the underlying network infrastructure.

WebSphere Presence Server is part of the IBM next-generation services platform for telecommunications. Based on SOA principles — reusing individual service components and separating the creation and execution of new service applications from the underlying network — the IBM next-generation services platform provides a flexible execution environment for rich IP-based services. As part of this telecom service platform, IBM has developed IMS-compliant service enablers — IBM WebSphere IP Multimedia Subsystem Connector, WebSphere Presence Server and IBM WebSphere Telecom Web Services Server — to help minimize the cost and time to deliver rich, composite services to market.

A centralized enabler would provide flexibility for new and existing services to plug in to a common infrastructure, allowing services to be deployed more easily in less time. The isolated nature of these discrete environments also increases the management cost of developing, deploying and maintaining presence and group list capabilities.

Utilize an independent, cross-application presence server built for service provider networks

IBM WebSphere® Presence Server, part of the IBM next-generation services platform for telecommunications, leverages an SOA approach that provides the ability to integrate presence functionality across disparate applications. It gives service providers the flexibility to keep presence information specific to an application, share it across a subset of services or make it available to all services. For example, a service provider might choose to enhance a phone book application to display both phone and instant message status. Whether introducing new services or enhancing existing ones, a new enabler does not have to be deployed for each service — instead, a common enabler may be used for all. By facilitating the creation of enhanced services and making them easy and cost-efficient to manage, WebSphere Presence Server provides significant benefits to both service providers and their customers.

Aggregate presence information to make subscribers' communications more productive

WebSphere Presence Server enhances end-user value by providing common intelligence about presence that can flow across applications. When subscribers can take advantage of an aggregating entity that brings together presence and other collaboration information, they can make their communications more efficient and productive.

For example, today many phone book applications on mobile phones only store contacts. But with presence information integrated into it, a phone book can show subscribers whether their friends are available before calling them. A presence-enabled phone book can also aggregate different modes of communication and show the optimal contact method.

Harness maximum flexibility and reusability to decrease costs and increase revenue

WebSphere Presence Server helps you simplify the management — and minimize the cost — of aggregating presence information across disparate devices, applications and network

elements. With a common platform, you do not have to learn and manage numerous siloed presence environments from multiple vendors and find ways to patch them together. And since WebSphere Presence Server uses SOA principles, you can build, deploy and integrate these services independent of applications and the computing platforms on which they run.

Additionally, WebSphere Presence Server helps minimize the time to market for new integrated services. It is possible for new services to be launched more quickly, increasing the opportunity to begin receiving their associated revenue. Applications simply plug into the centralized presence and group list enablers. Developers can add presence information and group list capabilities to applications without developing a new presence or group list infrastructure. By reducing the bar to create rich applications, service providers can increase revenue opportunities by increasing the number of applications developed with presence functionality. At the same time, using a common enabler decreases cost by removing the need for developing, deploying and maintaining multiple presence platforms.

Enhance collaboration services with a telecommunications-focused presence platform

WebSphere Presence Server is a carrier-grade, stand-alone platform with key features that include:

- **IMS compliance** — supports service provider IMS networks through standards-based IMS service control (ISC) and Diameter interfaces to connect to IMS control plane elements.
- **Application and service independence** — provides for the integration of presence information from both devices and external presence providers, such as enterprises or network elements, to any standards-based application, such as instant messaging and presence-enabled phone books.
- **Underlying IBM WebSphere Application Server platform** — helps simplify the development of integrated applications that take advantage of the converged HTTP/SIP container and proxy server, while providing proven manageability, scalability and security.
- **Standard and custom presence object support** — enables the extension of presence beyond people to objects such as delivery trucks and conference rooms.
- **Eclipse-based tooling** — enables developers to leverage SIP extensions to utilize SIP capabilities in their applications, while enjoying the continuity of using a familiar, proven tooling environment.
- **Compliance with Internet Engineering Task Force (IETF), Open Mobile Alliance (OMA), European Telecommunications Standards Institute (ETSI) and 3rd Generation Partnership Project (3GPP) standards** — promotes widespread integration among multivendor applications, devices and network infrastructure.

Gain the additional functional and technical capabilities you need for IMS deployments and group list management

Service providers need the flexibility to deploy presence within their telecommunications network and broader IMS plans. To accommodate this, WebSphere Presence Server bundles WebSphere IP Multimedia Subsystem Connector and a group list server. WebSphere IP Multimedia Subsystem Connector supports service provider IMS networks through standards-based ISC and Diameter interfaces. WebSphere Presence Server uses WebSphere IP Multimedia Subsystem Connector to connect to IMS control plane elements.

Bundling IBM's fully functional and independent group list server helps service providers when deploying presence and group list capabilities together. When you use the group list server with WebSphere Presence Server, you can:

- Enable users and administrators to create and manage network-based groups.
- Maintain access lists, permissions and other service-specific properties associated with those groups and group members.
- Offer customers group lists that work across all applications.

Although WebSphere Presence Server and the group list server are designed

to work in coordination with each other, they can also function independently. For example, WebSphere Presence Server can utilize either the included group list server or group list management capabilities from a different vendor. And the group list server may be deployed separately from the presence component, to enable group list management capabilities across a broad range of applications.

Take advantage of extensive IBM experience in developing "presence intelligence"

WebSphere Presence Server benefits from the extensive experience IBM has with presence functionality and working with telecom service providers, including:

- IBM Lotus® Sametime® instant messaging, which serves more than 16 million users.
- SIP-based collaboration gateway that enables presence sharing between service providers, enterprises and other environments.
- A joint research initiative led by a major service provider that developed advanced presence services for mobile users.
- Experience with 14 of the world's 15 largest telecom service providers leveraging IBM middleware for their applications.

WebSphere Presence Server leverages this experience to enable you to provide the "presence intelligence" your customers desire. With the aggregated presence capabilities made possible by WebSphere Presence Server, and leveraging SOA principles, it is possible for telecommunications service providers can create new services — more *intelligent* services — at lowered maintenance costs.

Hardware and software requirements

WebSphere Presence Server requires IBM WebSphere Application Server Network Deployment, Version 6.1. For details on all hardware and software requirements, visit **ibm.com**/software/ pervasive/presenceserver/sysreqs

For more information

To learn more about WebSphere Presence Server, contact your IBM representative or IBM Business Partner, or visit **ibm.com**/software/pervasive/ presenceserver

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